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ABSTRACT OF THE DISCLOSURE

A flow rate measuring apparatus capable of accurately measuring a flow rate of fluctuating fluid. A mode setting circuit selectively sets any one of a plurality of predetermined transmission modes different in transmission timing. The mode setting circuit sets any one of a first transmission mode which permits an ultrasonic wave to be transmitted at a predetermined timing for every period of a flow waveform of exhaust gas, a second transmission mode which permits an ultrasonic wave to be transmitted at a timing shifted by a predetermined time for every period of the flow waveform of the exhaust gas and a third transmission mode which permits an ultrasonic wave to be transmitted at predetermined intervals.